AMENDMENTS TO THE CLAIMS

1. (Currently Amended): A ferroelectric liquid crystal display, comprising:

an upper substrate provided with a transparent electrode and an alignment film;

a lower substrate opposed to the upper substrate and provided with a pixel electrode and an alignment film; and

a ferroelectric liquid crystal uniformly aligned with an application of a direct current voltage between the upper and lower substrates, the ferroelectric liquid crystal having a small amount of photo crosslinkable or light-hardening polymer to form a polymer network,

wherein the polymer network is formed after the ferroelectric liquid crystal is changed from a nematic phase or an isotropic phase into a smectic phase and maintains the [[an]] uniform alignment of the ferroelectric liquid crystal.

2. (Original): The ferroelectric liquid crystal display according to claim 1, wherein a temperature during injection of the ferroelectric liquid crystal is above a temperature causing a phase transition from a smectic phase into a nematic phase.

3. (Canceled):

4. (Previously Presented): The ferroelectric liquid crystal display according to claim 1, wherein a temperature is varied after injection of the ferroelectric liquid crystal such that the ferroelectric liquid crystal is changed from the nematic phase or the isotropic phase into a smectic phase at least once when the ferroelectric liquid crystal is uniformly aligned.

5. (Previously Presented): The ferroelectric liquid crystal display according to claim 1, wherein the photo crosslinkable or light-hardening polymer forms the polymer network when exposed to a light intensity range of an ultraviolet light of about 1 to about 5 mW/cm^2.

6. (Original): The ferroelectric liquid crystal display according to claim 1, wherein the photo crosslinkable or light-hardening polymer forms a polymer network when exposed to ultraviolet light such that a range of total exposure energy of the ultraviolet light exposed when the polymer is formed is about 240 to about 1200 mJ/cm^2.

7. (Original): The ferroelectric liquid crystal display according to claim 5, wherein an ultraviolet lamp for generating the ultraviolet light is selected from any one of a Hg lamp and a Xe lamp.

8. (Original): The ferroelectric liquid crystal display according to claim 6, wherein an ultraviolet lamp for generating the ultraviolet light is selected from any one of a Hg lamp and a Xe lamp.

9. (Original): The ferroelectric liquid crystal display according to claim 7, wherein a wavelength range of the ultraviolet light is about 365 ± 100 nm.

10. (Original): The ferroelectric liquid crystal display according to claim 8, wherein a wavelength range of the ultraviolet light is about 365 ± 100 nm.

11. (Currently Amended): A method of fabricating a ferroelectric liquid crystal display, comprising:

joining an upper substrate provided with a transparent electrode and an alignment film to a lower substrate opposed to the upper substrate and provided with a pixel electrode and an alignment film;

providing [[injecting]] a ferroelectric liquid crystal having a photo crosslinkable or light-hardening polymer between the joined upper and lower substrates;

uniformly aligning the ferroelectric liquid crystal by applying a direct current voltage to the electrodes of the upper and lower substrates; and

exposing an ultraviolet light to the uniformly aligned ferroelectric liquid crystal to form a polymer network after the ferroelectric liquid crystal is changed from a nematic phase or an isotropic phase into a smectic phase.

12. (Original): The method according to claim 11, wherein a temperature upon injection of the ferroelectric liquid crystal is above a temperature which causes a phase transition from a smectic phase into a nematic phase.

13. (Canceled):

14. (Previously Presented): The method according to claim 11, wherein a temperature is varied such that the ferroelectric liquid crystal is changed from the nematic phase or the isotropic phase into the smectic phase at least once when the ferroelectric liquid crystal is uniformly aligned.

15. (Original): The method according to claim 11, wherein a light intensity range of an ultraviolet light exposed when the polymer network is formed is about 1 to about 5 mW/cm^2.

16. (Original): The method according to claim 11, wherein a range of total exposure energy of the ultraviolet light exposed when the polymer is formed is about 240 to about 1200 mJ/cm^2.

17. (Original): The method according to claim 11, wherein an ultraviolet lamp for generating the ultraviolet light is selected from any one of a Hg lamp and a Xe lamp.

18. (Original): The method according to claim 17, wherein a wavelength range of the ultraviolet light is about 365 ± 100 nm.

19. (Currently Amended): A ferroelectric liquid crystal cell, comprising:

an upper substrate provided with a common electrode and an alignment film;

a lower substrate provided with a TFT array layer and an alignment film; and

a ferroelectric liquid crystal uniformly aligned with an application of a direct current voltage ~~provided in a space~~ between the upper and lower substrates, the ferroelectric liquid crystal having a photo crosslinkable or light-hardening polymer to form a polymer network,

wherein the polymer network is formed when the ferroelectric liquid crystal has a smectic phase and maintains the [[an]] uniform alignment of the ferroelectric liquid crystal.

20. (Previously Presented): The ferroelectric liquid crystal cell according to claim 19, wherein the ferroelectric liquid crystal has a smectic phase changed from one of an isotropic phase and a nematic phase.

21. (Previously Presented): The ferroelectric liquid crystal cell according to claim 20, wherein

the ferroelectric liquid crystal is phase-changed from the nematic phase or the isotropic phase into the smectic phase and simultaneously aligned in the direction of one of the two states.

22. (Canceled):

23. (Previously Presented): The ferroelectric liquid crystal cell according to claim 19, wherein an ultraviolet light is exposed to the ferroelectric liquid crystal to make the polymer network.

24. (Original): The ferroelectric liquid crystal cell according to claim 23, wherein a light intensity range of the ultraviolet light exposed when the polymer network is formed is about 1 to about 5 mW/cm^2.

25. (Currently Amended): The ferroelectric liquid crystal cell according to claim 23, wherein a total exposure energy range [[ranged]] of the ultraviolet light is about 240 to about 1200 mJ/cm^2.

26. (Original): The ferroelectric liquid crystal cell according to claim 23, wherein an ultraviolet lamp for generating the ultraviolet light is selected from any one of a Hg lamp and a Xe lamp.

27. (Original): The ferroelectric liquid crystal cell according to claim 23, wherein a wavelength range of the ultraviolet light is about 365 ± 100 nm.

28. (Previously Presented): The ferroelectric liquid crystal cell according to claim 19, wherein when a temperature of the ferroelectric liquid crystal is lowered to a temperature which causes a phase change into the smectic phase, the ferroelectric liquid crystal is uniformly aligned.

29. (Previously Presented): The ferroelectric liquid crystal display according to claim 1, wherein the uniform alignment is a mono-domain alignment.

30. (Previously Presented): The method according to claim 13, wherein the polymer network maintains the uniform alignment.

31. (Previously Presented): The method according to claim 30, wherein the uniform alignment is a mono-domain alignment.